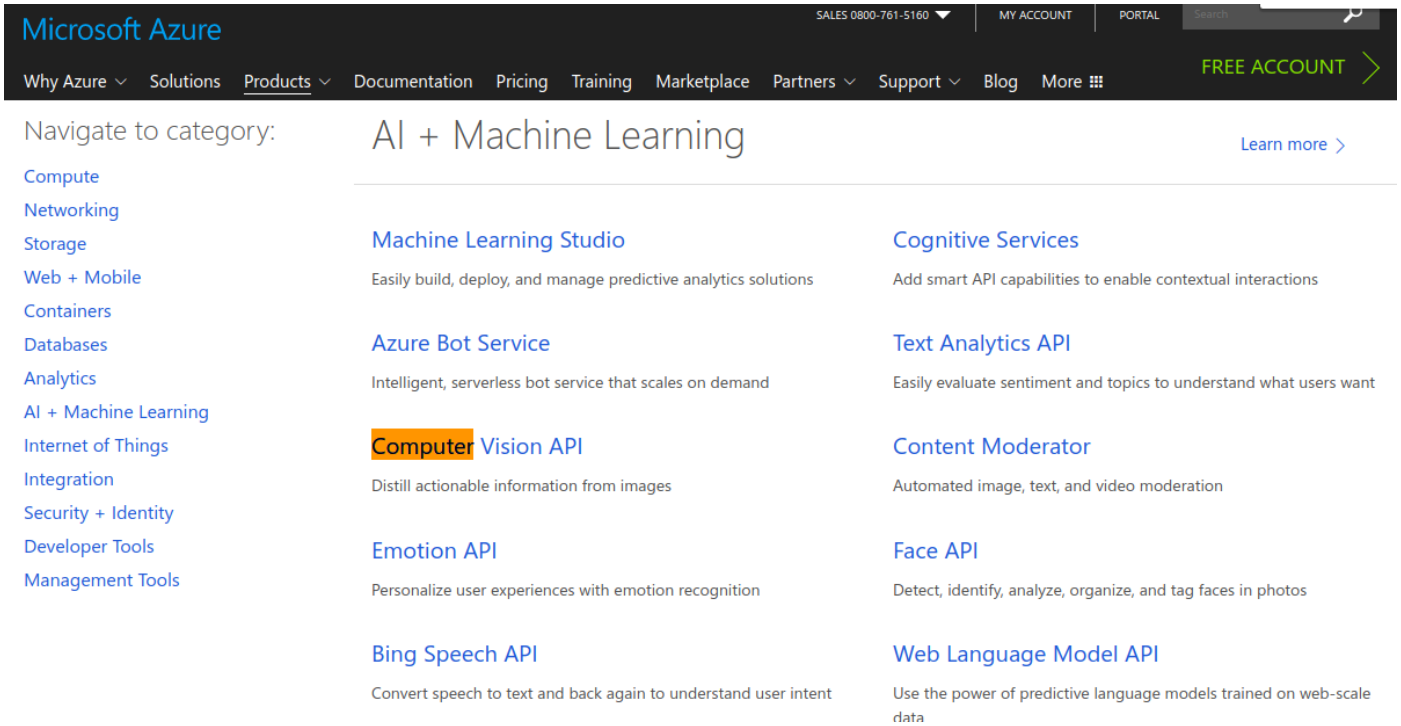
Computer Vision API

Mycrosoft Azure (https://azure.microsoft.com/en-us/services/)



- Computer Vision API tem um conjunto de algoritmos que processam as imagens e devolvem certa informação.

Computer Vision API

- Determinar os tipos de objetos.

See it in action

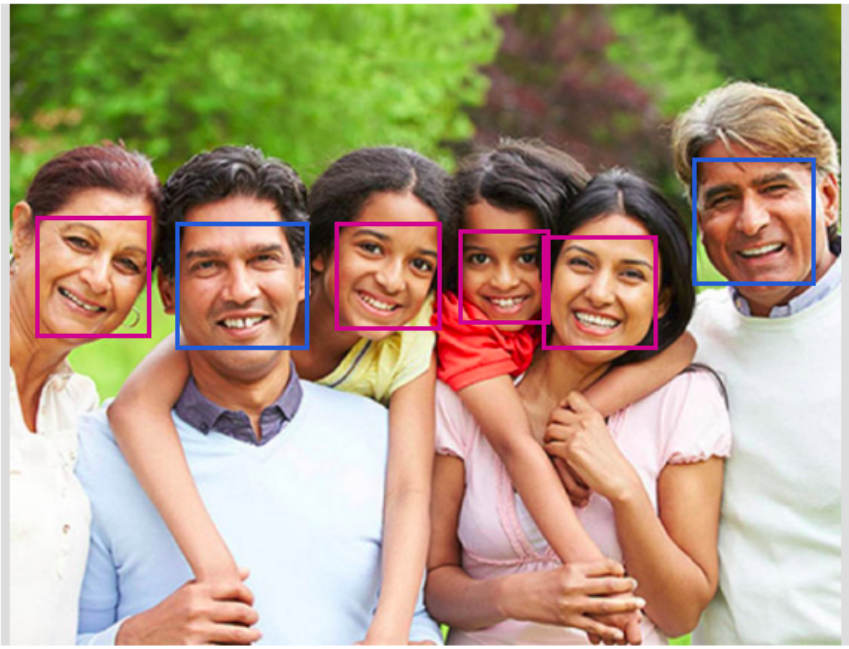
FEATURE NAME:	VALUE
Description	{ "tags": ["train", "platform", "station", "building", "indoor", "subway", "track", "walking", "waiting", "pulling", "board", "people", "man", "luggage", "standing", "holding", "large", "woman", "yellow", "suitcase"], "captions": [{ "text": "people waiting at a train station", "confidence": 0.833099365 }] }
Tags	[{ "name": "train", "confidence": 0.9975446 }, { "name": "platform", "confidence": 0.995543063 }, { "name": "station", "confidence": 0.9798007 }, { "name": "indoor", "confidence": 0.927719653 }, { "name": "subway", "confidence": 0.838939846 }, { "name": "pulling", "confidence": 0.431715637 }]
Image format	"Jpeg"

Image URL | Submit | Browse

Computer Vision API

- Reconhecimento de rostos.

See it in action



Faces

[{ "age": 40, "gender": "Male", "faceRectangle": { "top": 159, "left": 119, "width": 93, "height": 93 } }, { "age": 81, "gender": "Male", "faceRectangle": { "top": 110, "left": 490, "width": 92, "height": 92 } }, { "age": 60, "gender": "Female", "faceRectangle": { "top": 152, "left": 17, "width": 86, "height": 86 } }, { "age": 35, "gender": "Female", "faceRectangle": { "top": 166, "left": 386, "width": 82, "height": 82 } }, { "age": 30, "gender": "Female", "faceRectangle": { "top": 157, "left": 234, "width": 79, "height": 79 } }, { "age": 10, "gender": "Female", "faceRectangle": { "top": 162, "left": 322, "width": 68, "height": 68 } }]

Dominant color background

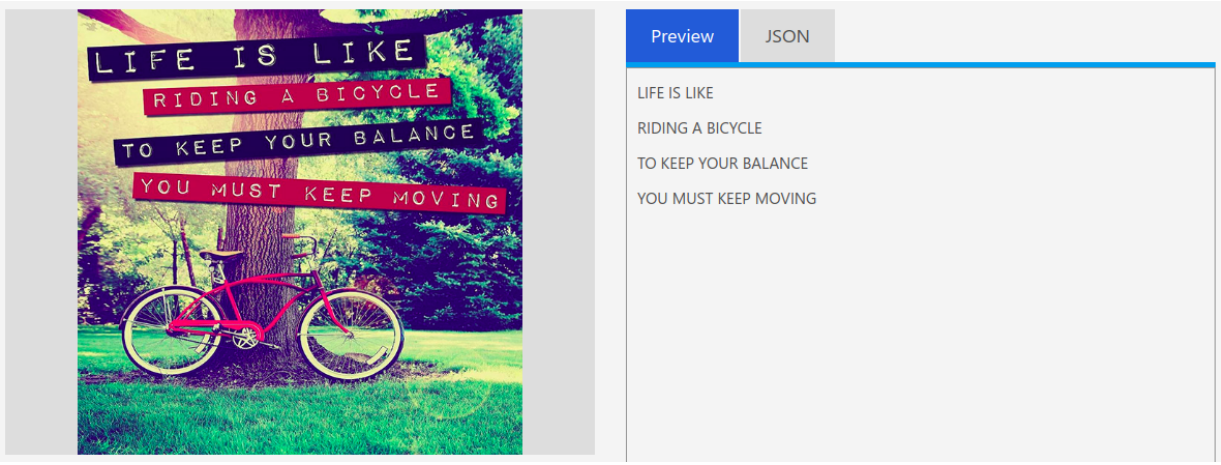
"White"

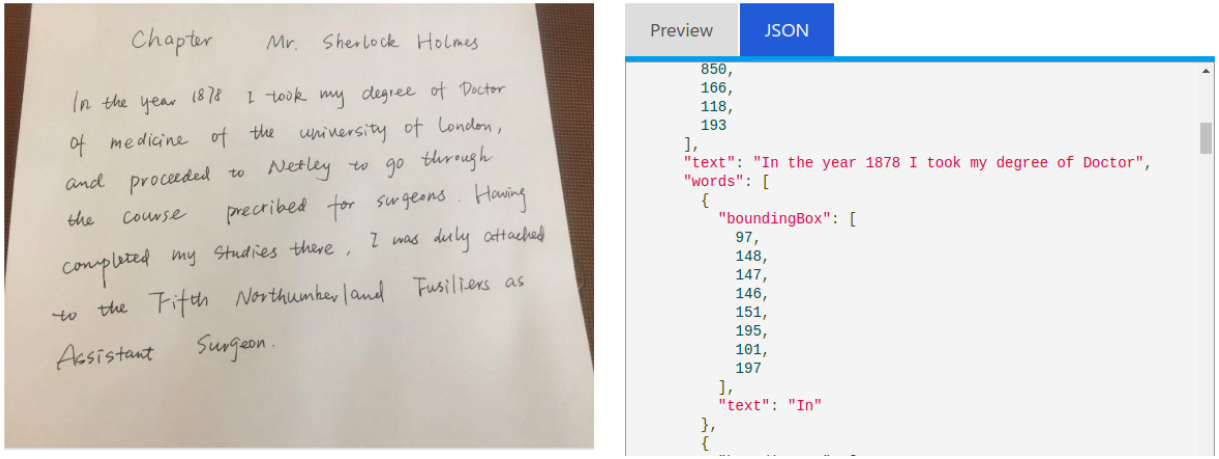
Dominant color foreground

"White"

Computer Vision API

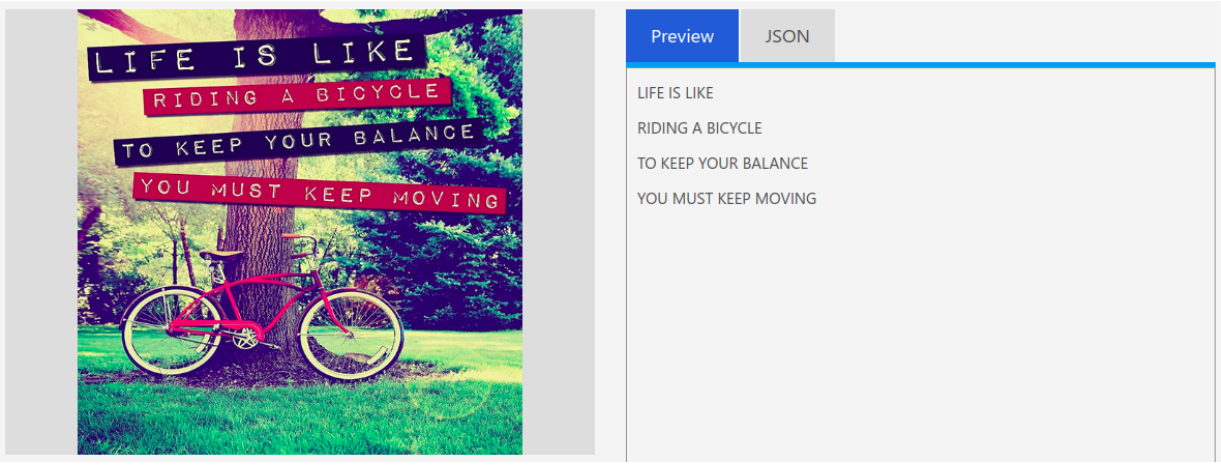
- Reconhecimento de Escrita.

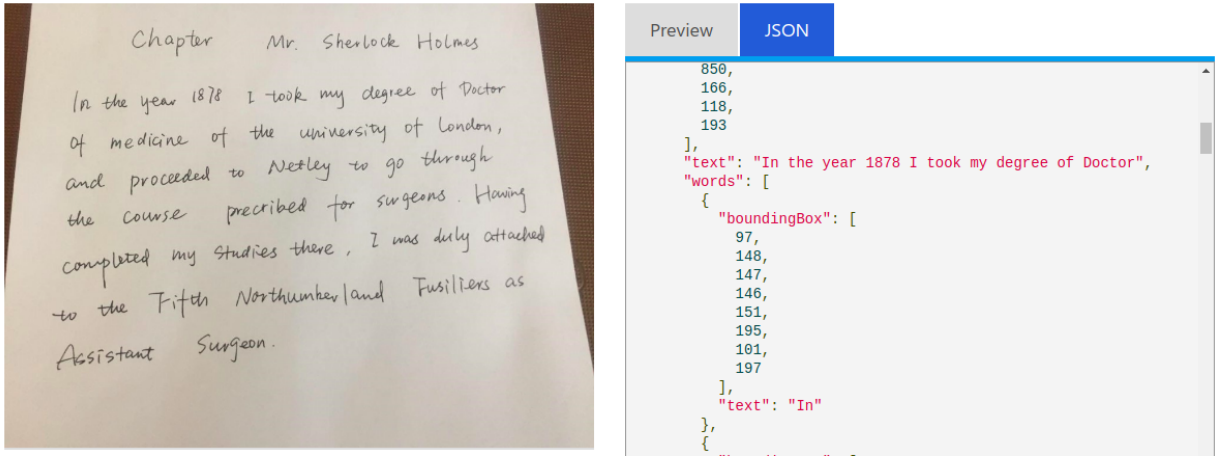




Computer Vision API

- Reconhecimento de Escrita.





Code: (https://docs.microsoft.com/en-us/azure/cognitive-services/Computer-vision/QuickStarts/PHP)

PHP Copy

```php
<?php
// This sample uses the Apache HTTP client from HTTP Components (http://hc.apache.org/httpcomponents-client-ga/)
require_once 'HTTP/Request2.php';

// NOTE: You must use the same location in your REST call as you used to obtain your subscription keys.
//   For example, if you obtained your subscription keys from westus, replace "westcentralus" in the
//   URL below with "westus".
$request = new Http_Request2('https://westcentralus.api.cognitive.microsoft.com/vision/v1.0/analyze');
$url = $request->getUrl();

$headers = array(
    // Request headers
    'Content-Type' => 'application/json',

    // NOTE: Replace the "Ocp-Apim-Subscription-Key" value with a valid subscription key.
    'Ocp-Apim-Subscription-Key' => '13hc77781f7e4b19b5fcdd72a8df7156',
);

$request->setHeader($headers);

$parameters = array(
    // Request parameters
    'visualFeatures' => 'Categories',
    'details' => '{string}',
    'language' => 'en',
);

$url->setQueryVariables($parameters);

$request->setMethod(HTTP_Request2::METHOD_POST);

// Request body
$request->setBody("{body}");  // Replace with the body, for example, "{"url": "http://www.example.com/images/image.jpg"}

try
{
    $response = $request->send();
    echo $response->getBody();
}
catch (HttpException $ex)
{
    echo $ex;
}

?>
```

Computer Vision API

- Reconhecimento de veículos.

FEATURE NAME:	VALUE
Description	{ "tags": ["car", "building", "road", "sitting", "parked", "small", "city", "street", "table", "mirror", "man", "police", "white", "parking", "riding", "driving", "bed", "people", "kitchen", "traffic", "blue"], "captions": [{ "text": "a car parked on the side of a building", "confidence": 0.953054667 }] }
Tags	[{ "name": "car", "confidence": 0.9977151 }]
Image format	"Jpeg"
Image dimensions	525 x 700
Clip art	0

NAME:	
Description	{ "tags": ["car", "building", "outdoor", "road", "parked", "transport", "street", "front", "parking", "old", "truck", "black", "lot", "police", "side", "sitting", "city", "surfing", "man", "meter", "standing", "cat", "white", "bed", "traffic", "mirror", "people", "riding"], "captions": [{ "text": "a car parked in a parking lot", "confidence": 0.9281143 }] }
Tags	[{ "name": "car", "confidence": 0.999999762 }, { "name": "building", "confidence": 0.9993393 }, { "name": "outdoor", "confidence": 0.995050251 }, { "name": "road", "confidence": 0.9934556 }, { "name": "parked", "confidence": 0.8595401 }, { "name": "transport", "confidence": 0.8093205 }, { "name": "parking", "confidence": 0.5133954 }, { "name": "old", "confidence": 0.451813 }, { "name": "roof", "confidence": 0.27805078 }, { "name": "van", "confidence": 0.1576775 }, { "name": "curb", "confidence": 0.131892726 }]